



Design & Technology Policy

Rationale

Design and Technology is essentially a practical problem solving process. It provides relevant purposeful activities because it is concerned with real things. It is an exciting and motivating activity, which enables a variety of learning and thinking to take place. Children are given the opportunity to find out how things are made, think about how to design a product for themselves, make decisions and choices for themselves, and develop thinking and problem solving skills. They are encouraged to work with others and through the creative use of materials they begin to develop initiative and experience the pleasure and satisfaction of creating, and of problem solving.

Purpose

- To develop children's ability to work cooperatively, by asking each other for help, by making suggestions to find solutions to challenges.
- To provide opportunities for children to make decisions and respond to feedback, by teaching children designing and making skills, from identifying a need to adapting, refining or inventing a product that meets an identified need.
- To provide the opportunity to work with a range of materials, including wood and other resistant materials and begin to understand the particular qualities of these materials.
- To ensure that children understand the safe and appropriate use of a range of tools and develop the skill to use them effectively.
- To develop imagination and inventiveness.
- To provide opportunities for girls and boys to develop basic problem solving skills, manipulative skills, and aesthetic experiences.
- To provide opportunities to use design technology skills across curriculum boundaries.
- To allow children to experience the satisfaction and enjoyment of taking control of their learning in purposeful contexts.
- Explore and evaluate a range of existing products.

Guidelines

1. Design & Technology will be taught for a minimum number of hours per week:
 - Key Stage 1:
Year 1: 45 minutes per week
Year 2: 45 minutes per week

The teaching of Design & Technology should take place within a learning environment, in which all children make as much academic ('maximised value added') progress as possible. It should be taught systematically and methodically each week, adhering to the governing principles, detailed below - within a caring and supportive climate, providing all children with an equitable, standardised, balanced, child-centred, ICT-rich curriculum. However, with time and maturity, and the rise in contextual value added progress that children and teachers will make as a result, progressively more reflective practitioners will utilise 'assessment for learning'



information to engender an increasingly more diverse, rich and personalised learning culture within this framework. Accordingly, practitioners may well decide, within this context, to customise their own planning and teaching. Teachers may use assessment for learning information to provide a more reflective and responsive curriculum for their class, engendering personalised learning opportunities to identify and tackle the needs of individuals and groups of children to maximise learning opportunities. Similarly, teachers may decide within their year group to adjust the timings of individual lessons. On occasion, it will be appropriate to have a series of short lessons and, at others, children may require time to develop ideas, and refine and consolidate learning within a more sustained period.

2. In Key Stage 1 teachers will refer to the School's Scheme of Work, which is intrinsically linked to the National Curriculum. In the Foundation Stage, teachers will refer to the LA's 'Improving the Foundation Stage' and the DfES EYFS Curriculum when mapping the provision for this subject.
3. The Medium Term Plans map out the learning intentions for each unit from the National Curriculum.
4. In Key Stage 1, Design & Technology is taught by means of a "Whole Class Interactive" approach to learning, employing a lively pace and an episodic style of teaching, with a high emphasis on oracy, class participation and effective pupil/teacher demonstration and modelling.
5. Design & Technology will be taught systematically yet within a caring and supportive climate, where children feel sufficiently secure to take risks.
6. Within the different episodes of the Whole Class Interactive Teaching lesson, teachers will skilfully use differentiated questioning to:
 - I. engage children in effective pupil demonstration and modelling;
 - II. scaffold children through extended dialogue, to improve oracy skills, enhance self-esteem and to extend their children's learning through giving extended responses;
 - III. identify assessment for learning information, to gauge understanding and to re-focus teaching, if necessary;
 - IV. offer children focused feedback.
7. Short term plans should state clearly the learning intention in 'child speak' and the learning intention must be shared with the class, so that children know what they are expected to learn. The teacher must be sure of the learning purpose of the lesson. All children need positive feedback to reinforce their knowledge and self-confidence and activities may need to be modified to ensure that all children can participate.
8. Wherever possible, questioning and discussion should be encouraged between pupil and adult, and pupil and pupil.
9. The aims of the National Curriculum for Design and Technology aims to ensure that all pupils:



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- Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
- Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.
- Critique, evaluate and test their ideas and products and the work of others.
- Understand and apply the principles of nutrition and learn how to cook.

10. Children will be taught skills and knowledge on the basis of termly units.

11. Children will be provided with as wide a choice of suitable materials as possible.

12. Many suitable materials can be provided from thrown away items e.g. cardboard boxes, tubes, plastic bottles, lids etc.

13. Different materials possess different physical and aesthetic qualities and children need help to understand how the properties of material determine its use and the tools that will be needed

14. Children will be encouraged to develop a responsible attitude to work and to use tools safely.

15. Children will be shown how to use tools and materials and will be given rules for safety.

16. Teachers must ensure that children are overseen as they work to ensure the safe use of tools

17. Teachers should aim to give children choices and opportunities to develop independence, whilst ensuring that the purpose of the task is maintained.

18. Consideration should be given to planned use of construction kits and their value in developing imagination and creativity and providing opportunities for role-play and decision-making. They are valuable in improving manipulative skills and hand/eye coordination.

19. Health and Safety:

- Activities must be carefully planned in order that children are closely supervised.
- Children should be shown the correct way to handle tools and equipment
- Cooking surfaces should be clean and adults and children's hands should be washed.
- Allergies should be taken into account when planning a cooking activity.

20. Teachers will integrate ICT wherever appropriate into all lessons:

a. Within the various episodes of the Teaching & Guided Practice Segment:

- as a tool to aid the teaching of key skills; engage children, encourage pupil modelling & demonstration and to enhance oracy.



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b. Within the Child Consolidation Segment:

- enabling children to undertake an ICT-based alternative activity, directly consolidating the learning intention for that lesson;

or

- to provide an activity which consolidates the lesson's learning intention, whilst at the same time embedding skills linked to that week's ICT lesson.

Within this manner, ICT will be employed as a vehicle to engender oracy, independent and collaboration worked and personalised learning, linked to this subject.